

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	2	(10/661752 10/661394).app.	US-PGPU B; USPAT	OR	ON	2006/04/27 16:48
S2	45	(("66584048") or ("20030123344") or ("20020191517") or ("5764430") or ("4027217") or ("5745457") or ("6026066") or ("6295261") or ("5182741") or ("6452883") or ("6317399") or ("4967286") or ("5398231") or ("5498509") or ("5608717") or ("5608718") or ("5627895") or ("5675570") or ("5688173") or ("5729533") or ("5748607") or ("5751671") or ("5781221") or ("5766495") or ("5846131") or ("5875156") or ("5915858") or ("5949752") or ("5958651") or ("5967676") or ("5997976") or ("6019151") or ("6034930") or ("6102800") or ("6104677") or ("6124011") or ("6160789") or ("6202550") or ("6264295") or ("6270176") or ("6384929") or ("6396667") or ("6403191") or ("6440248") or ("6469969") or ("6074031") or ("20020191517")).PN.	US-PGPU B; USPAT; USOCR	OR	OFF	2006/04/25 15:22

## EAST Search History

S3	44	((("4967286") or ("5398231") or ("5498509") or ("5608717") or ("5608718") or ("5627895") or ("5675570") or ("5688173") or ("5729533") or ("5748607") or ("5751671") or ("5781221") or ("5766495") or ("5846131") or ("5875156") or ("5915858") or ("5949752") or ("5958651") or ("5967676") or ("5997976") or ("6019151") or ("6034930") or ("6102800") or ("6104677") or ("6124011") or ("6160789") or ("6202550") or ("6264295") or ("6270176") or ("6384929") or ("6386667") or ("6403191") or ("6440248") or ("6469969") or ("6074031") or ("20020191517") or ("5764430") or ("4027217") or ("5745457") or ("6026066") or ("6295261") or ("5182741") or ("6452883") or ("6317399"))). PN.	US-PGPU B; USPAT; USOCR	OR	OFF	2006/04/25 10:29
S4	46	S2 S3	US-PGPU B; USPAT	OR	ON	2006/04/25 10:29
S5	15	S4 and focus\$4	US-PGPU B; USPAT	OR	ON	2006/04/25 10:29
S6	1610	((369/44.29) or (369/44.34) or (369/53.28)).CCLS.	US-PGPU B; USPAT; USOCR	OR	OFF	2006/04/25 10:33
S7	34588	focus\$3 near4 (error gain control)	US-PGPU B; USPAT	OR	ON	2006/04/25 10:34
S8	405313	(optical digital compact video) adj2 (disc disk storage medium) cd dvd	US-PGPU B; USPAT	OR	ON	2006/04/25 10:35
S9	4197319	label\$4 image picture draw\$4	US-PGPU B; USPAT	OR	ON	2006/04/25 10:36

## EAST Search History

S10	686	S7 same S8 same S9	US-PGPU B; USPAT	OR	ON	2006/04/25 10:48
S11	114	S10 same actuator	US-PGPU B; USPAT	OR	ON	2006/04/25 11:00
S12	50536	fourier near3 (coefficient term series transform sum)	US-PGPU B; USPAT	OR	ON	2006/04/25 15:15
S13	126	S7 same S12	US-PGPU B; USPAT	OR	ON	2006/04/25 15:15
S14	2	S13 same S8	US-PGPU B; USPAT	OR	ON	2006/04/25 15:15
S15	88	S13 and S8	US-PGPU B; USPAT	OR	ON	2006/04/25 15:15
S16	50232	sum near3 (signal table)	US-PGPU B; USPAT	OR	ON	2006/04/25 15:16
S17	423417	focus\$3	US-PGPU B; USPAT	OR	ON	2006/04/25 15:17
S18	147387	(actuator servo) near4 (control\$4 adjust\$4 error gain\$3)	US-PGPU B; USPAT	OR	ON	2006/04/25 15:17
S19	362	S18 same S16 same S17	US-PGPU B; USPAT	OR	ON	2006/04/25 15:17
S20	123	S19 and S6	US-PGPU B; USPAT	OR	ON	2006/04/25 15:19
S21	4078730	sector region zone section area portion	US-PGPU B; USPAT	OR	ON	2006/04/25 15:21
S22	101	S19 same S21	US-PGPU B; USPAT	OR	ON	2006/04/25 16:08
S23	25	S22 and S6	US-PGPU B; USPAT	OR	ON	2006/04/25 15:40
S24	1	10/159399.app.	US-PGPU B; USPAT	OR	ON	2006/04/25 15:41
S25	95	S22 and "369".clas.	US-PGPU B; USPAT	OR	ON	2006/04/25 18:19
S26	49	hajjar-roger\$.in.	US-PGPU B; USPAT	OR	ON	2006/04/25 18:19
S27	1	S26 and perry-stuart\$.in.	US-PGPU B; USPAT	OR	ON	2006/04/25 18:19

## EAST Search History

S28	11	("3881184"   "4439848"   "4764914"   "4866688"   "5121374"   "5532990"   "5539714").PN. OR ("5742573").URPN.	US-PGPU B; USPAT; USOCR	OR	ON	2006/04/26 18:17
S29	1	runout near6 (sum near2 signal)	US-PGPU B; USPAT	OR	ON	2006/04/25 18:20
S30	11	runout same (sum near2 signal)	US-PGPU B; USPAT	OR	ON	2006/04/25 18:20
S31	1293	(stor\$4 record\$4) near4 (sum near2 signal)	US-PGPU B; USPAT	OR	ON	2006/04/25 18:20
S32	94	S31 same S17	US-PGPU B; USPAT	OR	ON	2006/04/25 18:20
S33	81	S32 and "369".clas.	US-PGPU B; USPAT	OR	ON	2006/04/25 18:38
S34	191	(tabulat\$3 table) near8 (sum near2 signal)	US-PGPU B; USPAT	OR	ON	2006/04/25 18:39
S35	34	S34 and "369".clas.	US-PGPU B; USPAT	OR	ON	2006/04/25 18:39

## EAST Search History

S36	53	("4513407"   "4677602"   "4682332"   "4730295"   "4761776"   "4785451"   "4791627"   "4856108"   "4862447"   "4864118"   "4866692"   "4878211"   "4893298"   "4901300"   "4959822"   "4972401"   "5014274"   "5023854"   "5023856"   "5060219"   "5124966"   "5140580"   "5146443"   "5247494"   "5295127"   "5333126"   "5339301"   "5341356"   "5377178"   "5390159"   "5408454"   "5418764"   "5434834"   "5459712"   "5467335"   "5479388"   "5491677"   "5587991"   "5610880"   "5654947"   "5729511"   "5740143"   "5793737"   "5831946"   "5835462"   "5841739"   "5850382"   "5875158"   "5881044"   "5886985"   "5896353"   "5995462"   "6087644").PN. OR ("6813226").URPN.	US-PGPU B; USPAT; USOCR	OR	ON	2006/04/26 10:53
S37	111	("2978647"   "3430053"   "3684940"   "3691543"   "3851238"   "3893180"   "3959820"   "3994016"   "4133011"   "4190859"   "4338682"   "4340950"   "4406000"   "4439800"   "4446546"   "4475182"   "4488188"   "4504937"   "4546395"   "4551776"   "4564929"   "4580255"   "4587644"   "4594539"   "4613963"   "4616353"   "4682253"   "4683560"   "4700056"   "4707648").PN. OR ("4878211").URPN.	US-PGPU B; USPAT; USOCR	OR	ON	2006/04/26 14:40

## EAST Search History

S38	2819	focus\$4 near6 sum\$6	US-PGPU B; USPAT; USOCR	OR	ON	2006/04/26 14:41
S39	3073594	stor\$4 tabul\$5 table	US-PGPU B; USPAT; USOCR	OR	ON	2006/04/26 14:44
S40	92	S38 near10 S39	US-PGPU B; USPAT; USOCR	OR	ON	2006/04/26 14:44
S41	22	S40 and "369".clas.	US-PGPU B; USPAT; USOCR	OR	ON	2006/04/26 14:44
S42	102	S38 near10 sampl\$4	US-PGPU B; USPAT	OR	ON	2006/04/26 16:36
S43	2	((("4866688") or ("4439848"))).PN.	US-PGPU B; USPAT; USOCR	OR	OFF	2006/04/26 16:42
S44	624	focus\$4 same error same (eccentric\$3 warp\$3)	US-PGPU B; USPAT	OR	ON	2006/04/26 17:30
S45	81410	("369" "347").clas.	US-PGPU B; USPAT	OR	ON	2006/04/26 16:56
S46	413	S44 and S45	US-PGPU B; USPAT	OR	ON	2006/04/26 16:56
S47	16	S44 same sum and S45	US-PGPU B; USPAT	OR	ON	2006/04/26 16:56
S48	55	S44 same (offset calibrat\$3) and S45	US-PGPU B; USPAT	OR	ON	2006/04/26 17:26
S49	2	09/758405.app.	US-PGPU B; USPAT	OR	ON	2006/04/26 17:23
S50	9	("4745587"   "5479389"   "5559768"   "5761165"   "5901121"   "5926338"   "6137753"   "6147944"   "6266304").PN. OR ("6765848").URPN.	US-PGPU B; USPAT; USOCR	OR	ON	2006/04/26 17:23
S51	3613	focus\$4 same (eccentric\$3 warp\$3)	US-PGPU B; USPAT	OR	ON	2006/04/26 17:30

## EAST Search History

S52	86	(feed-forward feed adj forward) and S51	US-PGPU B; USPAT	OR	ON	2006/04/26 17:31
S53	54	S52 and S45	US-PGPU B; USPAT	OR	ON	2006/04/26 17:41
S54	4	((("20030108708") or ("5093798") or ("6567357") or ("6985419")).PN.	US-PGPU B; USPAT; USOCR	OR	OFF	2006/04/26 17:52
S55	2	((("5892742") or ("5550685")).PN.	US-PGPU B; USPAT; USOCR	OR	OFF	2006/04/26 17:53
S56	489	(eccentric\$3 warp\$3) same ((writ\$3 label\$3) near4 (label image picture drawing))	US-PGPU B; USPAT; USOCR	OR	ON	2006/04/26 18:18
S57	255243	(lens actuator opu pickup) near6 (toward away mov\$4 shift position\$3)	US-PGPU B; USPAT	OR	ON	2006/04/27 09:19
S58	171558	eccentric\$3 warp\$3	US-PGPU B; USPAT	OR	ON	2006/04/27 09:19
S59	3862	S57 same S58	US-PGPU B; USPAT	OR	ON	2006/04/27 09:19
S60	758	S59 and "369".clas.	US-PGPU B; USPAT	OR	ON	2006/04/27 09:19
S61	69397	(lens actuator opu pickup) near6 (toward away)	US-PGPU B; USPAT	OR	ON	2006/04/27 09:20
S62	50	S61 same S58 and "369".clas.	US-PGPU B; USPAT	OR	ON	2006/04/27 09:19
S63	60	("3532045"   "3596101"   "3673412"   "3757124"   "3833769"   "3876841").PN. OR ("3997715").URPN.	US-PGPU B; USPAT; USOCR	OR	ON	2006/04/27 09:19
S64	72801	(lens actuator opu pickup) near6 (up down axial\$3)	US-PGPU B; USPAT	OR	ON	2006/04/27 09:20
S65	133	S64 same S58 and "369".clas.	US-PGPU B; USPAT	OR	ON	2006/04/27 09:45
S66	530	axial\$3 near2 (runout run-out)	US-PGPU B; USPAT	OR	ON	2006/04/27 09:47
S67	2866810	correct\$4 compensat\$4 adjust\$4 detect\$4	US-PGPU B; USPAT	OR	ON	2006/04/27 09:47

## EAST Search History

S68	63	S66 near10 S67	US-PGPU B; USPAT	OR	ON	2006/04/27 10:35
S69	406072	(optical digital compact video) adj2 (disc disk storage medium) cd dvd	US-PGPU B; USPAT	OR	ON	2006/04/27 10:35
S70	13	S68 same S69	US-PGPU B; USPAT	OR	ON	2006/04/27 10:35
S71	1	("5742568").PN.	US-PGPU B; USPAT; USOCR	OR	OFF	2006/04/27 10:39
S72	0	nakase-hiromi\$.in. and inoue-hideaki\$.in.	US-PGPU B; USPAT	OR	ON	2006/04/27 10:43
S73	21200	S58 near10 S67	US-PGPU B; USPAT	OR	ON	2006/04/27 10:47
S74	7	nakase-hiromi\$.in. and inoue-hideaki\$.in.	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/04/27 10:41
S75	394	S73 near10 (focus\$3 sum\$3)	US-PGPU B; USPAT	OR	ON	2006/04/27 11:06
S76	2558057	stor\$3 memory table tabulat\$3	US-PGPU B; USPAT	OR	ON	2006/04/27 11:20
S77	39	S75 same S76	US-PGPU B; USPAT	OR	ON	2006/04/27 11:20
S78	13	S77 and S69	US-PGPU B; USPAT	OR	ON	2006/04/27 11:21
S79	73	S75 same S69	US-PGPU B; USPAT	OR	ON	2006/04/27 13:17
S80	3	S75 same rate	US-PGPU B; USPAT	OR	ON	2006/04/27 13:39
S81	88	S73 same rate and S69	US-PGPU B; USPAT	OR	ON	2006/04/27 13:56
S82	260	S73 same (writ\$3 record\$3) same S69	US-PGPU B; USPAT	OR	ON	2006/04/27 13:56
S83	26	S75 same (writ\$3 record\$3) same S69	US-PGPU B; USPAT	OR	ON	2006/04/27 13:59



## EAST Search History

S84	1	("4628379").PN.	US-PGPU B; USPAT; USOCR	OR	OFF	2006/04/27 15:23
S85	58029	gradual\$4 near3 (chang\$4 apply\$5 add\$4 compensat\$5)	US-PGPU B; USPAT	OR	ON	2006/04/27 15:24
S86	2618840	servo control	US-PGPU B; USPAT	OR	ON	2006/04/27 15:25
S87	1318	S85 near5 S86	US-PGPU B; USPAT	OR	ON	2006/04/27 15:26
S88	37	S87 and "369".clas.	US-PGPU B; USPAT	OR	ON	2006/04/27 15:27
S89	2	09/950441.app.	US-PGPU B; USPAT	OR	ON	2006/04/28 09:49
S90	848	(fes "focus error") near10 ((lens pickup pick-up) near4 (position height distance))	US-PGPU B; USPAT	OR	ON	2006/04/28 09:50
S91	119	(fes "focus error") near10 ((detect\$3 determin\$3 measur\$3) near4 ((lens pickup pick-up) near4 (position height distance)))	US-PGPU B; USPAT	OR	ON	2006/04/28 11:39
S92	5937	(servo actuator gain) near4 (resonance (frequency near2 response))	US-PGPU B; USPAT	OR	ON	2006/04/28 11:39
S93	171558	eccentric\$3 warp\$3	US-PGPU B; USPAT	OR	ON	2006/04/28 11:40
S94	43	S92 same S93	US-PGPU B; USPAT	OR	ON	2006/04/28 11:48
S95	2832	(servo actuator gain) near4 resonance	US-PGPU B; USPAT	OR	ON	2006/04/28 11:48
S96	71	S95 same (phase near2 shift)	US-PGPU B; USPAT	OR	ON	2006/04/28 11:49
S97	4	S96 and "369".clas.	US-PGPU B; USPAT	OR	ON	2006/04/28 11:49